

**Lawrence Berkeley National Laboratory
Project Management Office**

PROCEDURE

Page
1 of 9

Number: PMO-1.9

Revision: 0

Effective Date: June 1, 2005

Review Period: 3 years

Supersedes Issues:

Title:

CHANGE CONTROL

Section where used:

Project Management

Prepared by

Richard Stanton,
Facilities Project Management

Approved by

Jim Krupnick,
Laboratory Project Management Officer

Revision Log:

Rev. No.	Effective Date	Pgs. Affected	Brief Description of Revision

1.0 PURPOSE

This document describes change control for projects managed under the LBNL Earned Value Management System (EVMS). The change control procedure is documentation of changes to a project's Performance Measurement Baseline (PMB), including scope, budget and/or schedule.

2.0 SCOPE

The cost element of the PMB is the total time-phased budget plan against which project performance is measured. It depicts the schedule for expenditure of the resources allocated to accomplish program scope and schedule objectives and is formed by the budgets assigned to control accounts and summary-level planning packages, if any, plus any undistributed budget. The PMB does not include management reserve/contingency. Revisions to the baseline may affect the Performance Measurement Baseline Schedule (PMBS) milestones, and budget-at-complete (BAC) funding applications.

The Baseline Change Control Board (BCCB) as defined in the Project Execution Plan (PEP) is a committee consisting of one or more individuals designated and chartered by management to determine the merit of incorporating proposed changes to the project baseline. The BCCB is responsible for approving all Baseline Change Proposals (BCPs).

Title

CHANGE CONTROL

3.0 REFERENCES

DOE Order 413.3.
LBNL Earned Value Management System Description.
PMO Procedure 1.2, Work Breakdown Structure (WBS).
PMO Procedure 1.5, Control Account Plan/Work Authorization.
PMO Procedure 1.6, Project Schedule.
PMO Procedure 1.7, Cost Estimating.

4.0 PROCEDURE

The sequence of activities involved in this procedure is illustrated in Appendix A. The sequential action steps of the process are described below.

4.1 BCP Initiation**4.1.1 Change Proposed**

When a Control Account Manager (CAM) observes or is presented with a potential scope, schedule, or budget change the CAM will notify the Project Manager.

The CAM works with Project Controls to define the impacts of the proposed change. The CAM then submits a change, using a BCP Form, to the Project Manager. Project Controls will generate a BCP Log to obtain a BCP number and summarize the schedule and/or budget impact of the proposed change.

4.1.2 Subcontracted Effort

If a control account includes the oversight of a subcontract (e.g., Architect/Engineer services, construction effort), the Project Manager may authorize the CAM to process changes to the subcontract using contract change methodology, in addition to the formal BCP process. A log of all subcontract changes will be maintained by the CAM, or their designee, and made available to the Project Manager and Project Controls. The Project Manager and Project Controls will periodically review the log to insure changes are handled expeditiously and that the Estimate to Complete (ETC) amount reflects all known issues.

4.1.3 BCP Package Preparation

The CAM, supported by Project Controls, is responsible for the preparation, accuracy, and completeness of each BCP package, which contains the

Title**CHANGE CONTROL**

documents to support proposed budget and/or schedule change(s). Each BCP must be:

- Prepared using standard templates and formats.
- Tailored for the level and complexity of the change.
- Reviewed for consistency, completeness, correctness, and appropriate routing by Project Controls before submittal to the BCCB.

4.1.3.1 Reason/Justification

The driver of change falls into one of the following categories:

- **Scope Change:** This is an addition, deletion, or transfer of work scope to/from a body of formally authorized work represented in one or more control accounts. These occur as external, contract-level changes, or internal, Control Account Plan (CAP)-level changes.
- **Budget Change:** The budget of a given element of authorized work, which is currently planned in a future portion of the PMB, is newly estimated to be different than the budget originally associated with that work. In such a case, there have been no changes in requirements or objectives of the work. Typically, there are no activities added to or deleted from the PMBS.
- **Schedule Change:** Project priorities or unforeseen events may result in re-sequencing of project activities causing a change in the timing and/or definition of controlled or earned value milestones.

4.1.3.2 Consequence of Not Approving

If appropriate, the Project Manager shall attach an impact statement to the BCP package explaining the consequence of not approving the BCP.

4.1.3.3 Budget Source Impact

The Project Manager, with the assistance of Project Controls, shall attach a cost impact statement to the BCP package when budget is requested, returned, and/or transferred. This report shows the financial impact of the proposed change by Project ID and by job. This is relevant when Management Reserve/Contingency is requested/returned or when budget (and scope) is transferred. This information shall be reflected on the BCP Form and entered in the BCP Log when a BCP number is obtained.

Title

CHANGE CONTROL

When scope is moved between groups or in the schedule, the corresponding budget will accompany it, resulting in a scope and budget transfer.

4.1.3.4 Schedule/Contract Milestone Impact Statement

The Project Manager, with the assistance of Project Controls, shall provide a printout of the schedule to reflect the Level 1 through 4 Milestones that are affected if the BCP requires a Milestone revision.

Proposed schedule revisions shall be indicated in attached PMBS printouts provided by Project Controls to reflect the pending milestone and date changes with “before” and “after” versions. These will be entered into PMBS if/when the action is approved.

4.1.3.5 Management Reserve/Contingency Requirement

The Project Manager, with support from Project Controls, shall indicate if the impact of the change will result in a request for expenditure of project Management Reserve. If Management Reserve/ Contingency is requested, the Project Manager shall prepare the BCP for approval.

4.1.3.6 WBS Affected

The CAM shall indicate the Work Breakdown Structure (WBS) elements affected as a result of the change. If the change will impact other control accounts, the CAM shall notify the other affected CAMs to insure all issues are brought forward prior to approval of the change.

4.2 Disposition of BCP

The CAM should obtain signatures from Project Controls. Then the CAM submits the BCP to the BCCB with the proper authority, as defined in the PEP. The BCP can be approved, approved with changes, disapproved, or returned for revisions.

4.2.1 BCP Approval/Disapproval Processed

Once a BCP is either approved or disapproved, the BCP log shall be updated by the Project Manager and filed in numerical order, with a copy to Project Controls.

4.2.2 PMB Updates Made in PMBS

Title**CHANGE CONTROL**

The CAM must update all affected CAP documents that reflect scope, schedule, and budget information and assure that these updates are consistent with the approved BCP. This must be accomplished in a timely manner. Once done, Project Controls will complete the BCP log to indicate when the updates were made and by whom.

4.3 Documents and Records

Documents and records generated as a result of implementing this procedure shall be generated in a manner suitable for reproduction and shall be signed and dated at the time of completion. The Project Manager shall retain the official, signed documents. Project Controls shall retain approved electronic copies.

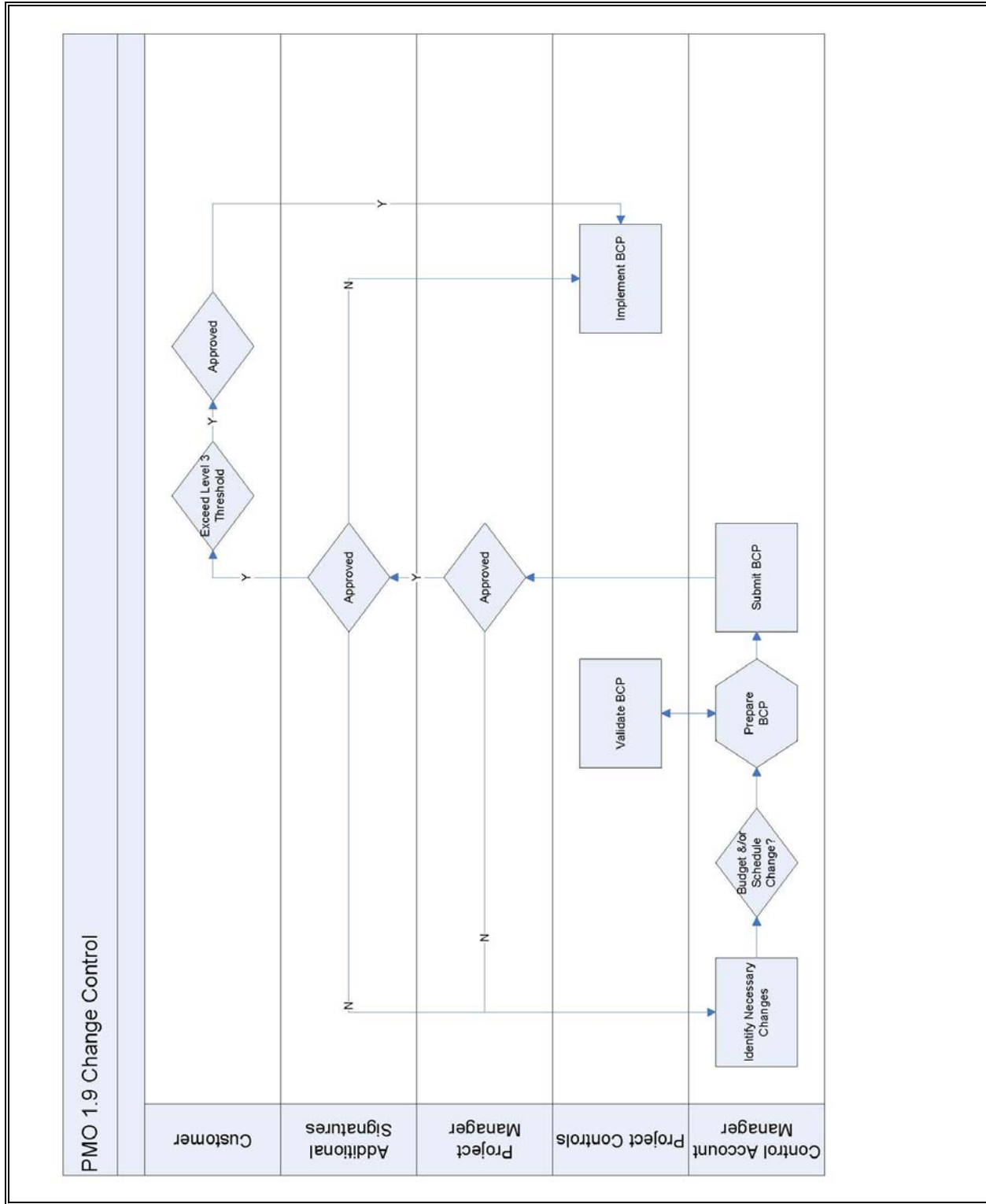
5.0 APPENDIX

Appendix A: Change Control Flow Diagram.

Appendix B: Baseline Change Proposal (BCP) Form.

Appendix C: Baseline Change Proposal (BCP) Log.

Title	APPENDIX A: CHANGE CONTROL FLOW DIAGRAM
--------------	---



Title**APPENDIX B: BASELINE CHANGE PROPOSAL (BCP) FORM****Molecular Foundry
Baseline Change Proposal**

Foundry Project Office

Change Number: _____

Change Originated By: _____

Date: _____

Change Description:

_____Change Justification:

_____Schedule Change (current and revised milestone dates):

_____Budget Change Description:

BCP Level: _____

Level 0 (DOE-SAE) ☐Level 1 (DOE-BES) ☐Level 2 (DOE-BSO) ☐Level 3 (LBNL) ☐

Title

APPENDIX B: BASELINE CHANGE PROPOSAL (BCP) FORM



**Molecular Foundry
Baseline Change Proposal**

Foundry Project Office

Approvals:

Project Manager:

(Name)

Date

Project Director:

(Name)

Date

Deputy for Scientific Program:

(Name)

Date

Site Operation Budget Officer:

(Name)

Date

Federal Project Director

(Name)

Date

BSO Director

(Name)

Date

Copies:

File:

Title

APPENDIX C: BASELINE CHANGE PROPOSAL (BCP) LOG



Molecular Foundry Project Change Authorization Log

Foundry Project Office

[illegible]

Original Baseline Contingency	0
Changes	0
Remaining Contingency	<u>0</u>

cc: J. Harkins
J. Krupnick
K. Johnescu
File: 1.3.1.13